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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/729,120	12/04/2003	Patrick M. Dolan	FSP0041	3175				
29586 FSP LLC P.O. BOX 890 VANCOUVER, WA 98666	7590 04/10/2007		<table border="1"><tr><td>EXAMINER</td></tr><tr><td>LEJA, RONALD W</td></tr></table>		EXAMINER	LEJA, RONALD W		
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			<table border="1"><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>2836</td><td></td></tr></table>	ART UNIT	PAPER NUMBER	2836		
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2836								
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE					
3 MONTHS		04/10/2007	PAPER					

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/729,120

Applicant(s)

DOLAN, PATRICK M.

Examiner

Ronald W. Leja

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the Amendment of 12/26/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,7 and 12-14 is/are rejected.
- 7) ☒ Claim(s) 2-4,6 and 8-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/4/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 7 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ueki et al. (4,638,789).

Ueki et al. disclose in Figures 5 and 9 a thermocouple (7) providing a first source of current in a first direction to the solenoid lead (10) and a sensor (14) activated switch (22) for applying a current from a second current source (21) to the solenoid lead in a second direction different from the first, which shuts off the gas valve within a gas-operated water heater. The sensor (14) varies its impedance in the presence of CO vapor so as to control the switch (22).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueki et al. in view of Brown (US2005/0048427 A1).

Claims 13 and 14 are drawn to the switch being a thermally actuated circuit breaking means. Ueki et al. suggest in Col. 1, lines 5-12 and Col. 7, lines 13-29 that other types of gas sensors or that even vibration sensors could be used to activate the switch and refer to this protection as an "accident detecting unit" which can be

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combined with any flame detecting unit, such as, the one disclosed by element (11) in Figure 5. Brown teaches the added protection of water heater with a fuse (OTS 72) or over temperature switch, for closing the gas valve when an undesired or unsafe high air-mixture temperature is sensed. Therefore, with the suggestions in Ueki et al., it is the opinion of the Examiner that it would have been obvious to provide a sensor activated switch for some other condition other than gas/vapor sensing, such as, for over-temperature sensing, and thereby, offer "an accident detecting unit" which provides shut-down of the gas valve when temperatures rise to unsafe levels, resulting in a highly reliable and safe water heater for the consumer.

Claims 2-4, 6 and 8-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a Statement of Reasons for the Indication of Allowable Subject Matter: The combinations resulting from the added limitations of the claims above are not disclosed nor suggested by the Prior Art of Record, and thus, are considered allowable. Namely wherein the SCR is selected so that the current heats the SCR sufficiently to break a thermal fuse coupled to the SCR or that a fusible link couples the solenoid lead with the thermocouple and couples the solenoid lead with the second current source.

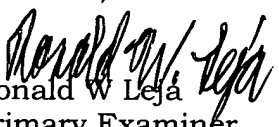
Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald W. Leja whose telephone number is (571)272-2053. The examiner can normally be reached on Monday thru Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)272-2800. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Ronald W Leja
Primary Examiner
Art Unit 2836

3/28/07

rwl
March 28, 2007